ENVIRONMENTAL CHEMISTS

Date of Report: 03/02/99 Date Received: 02/18/99

Project: Metro Self Monitor, PO# M78412

Date Samples Extracted: 02/26/99 Date Extracts Analyzed: 03/01/99

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

| Sample ID | | Chromium | Copper | Nickel | Zinc |
|-------------|---|----------|--------|--------|--------|
| M78412 | | 0.51 | 0.49 | 0.58 | <0.05 |
| | | | | | |
| Method Blan | k | < 0.05 | < 0.05 | < 0.05 | < 0.05 |

ENVIRONMENTAL CHEMISTS

Date of Report: 03/02/99 Date Received: 02/18/99

Project: Metro Self Monitor, PO# M78412

QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 902046-01 (Duplicate)

| | | Contraction (Contraction) | | And the State of the | Relative | |
|----------|----------|---------------------------|--------|----------------------|------------|------------|
| | | Reporting | Sample | Duplicate | e Percent | Acceptance |
| Analyte | N. Maria | Units | Result | Result | Difference | e Criteria |
| Chromium | | mg/L (ppm) | 0.30 | 0.31 | 3 | 0-20 |
| Copper | | mg/L (ppm) | 0.22 | 0.23 | 4 | 0-20 |
| Nickel | | mg/L (ppm) | 0.33 | 0.35 | 6 | 0-20 |
| Zinc | | mg/L (ppm) | < 0.05 | < 0.05 | nm | 0-20 |

Laboratory Code: 902046-01 (Matrix Spike)

| | | Reporting | Spike | Sample | % Recove | ery % Recove | ry Acceptance | | |
|-----|----------|------------|-------|--------|----------|--------------|---------------|-----|---|
| 1 | Analyte | Units | Level | Result | MS | MSD | Criteria | RPD | |
| : [| Chromium | mg/L (ppm) | 5 | 0.30 | 100 | 101 | 80-120 | 1 | - |
| | Copper | mg/L (ppm) | 5 | 0.22 | 98 | 89 | 80-120 | 10 | |
| | Nickel | mg/L (ppm) | 10 | 0.33 | 100 | 102 | 80-120 | 2 | |
| | Zinc | mg/L (ppm) | 5 | < 0.05 | 106 | 110 | 80-120 | 4 | |

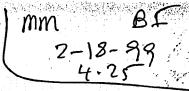
Laboratory Code: Laboratory Control Sample

| | Reporting | Spike | % Recovery | % Recover | y Acceptance | е (Д.) | |
|----------|------------|-------|------------|-----------|--------------|--------|---|
| Analyte | Units | Level | LCS | LCSD | Criteria | RPD | 1 |
| Chromium | mg/L (ppm) | 5 | 103 | 103 | 80-120 | 0 | |
| Copper | mg/L (ppm) | 5 | 105 | 104 | 80-120 | 1 | |
| Nickel | mg/L (ppm) | 10 | 102 | 102 | 80-120 | 0 | |
| Zinc | mg/L (ppm) | 5 | 101 | 104 | 80-120 | 3 | |

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

PJ # 902061



SAMPLE CHAIN OF CUSTODY

| Company AWSKAW Copper Works Contact Creak Ahonosow | | | | | | | | | | |
|--|--|-------------------|-------------------------|--------|---------------------------------------|------|--|--|--|--|
| Address 628 Howard 55. | | | | | | | | | | |
| City, State, Zip Seattle UA 98/34 | | | | | | | | | | |
| Phone # (206) 38 | 2-8379 | FAX # (7 | 106) 382-430 | 9 Da | te 2/18/9 | ۶ | | | | |
| | No. | , | | 1, 1/2 | | 100 | | | | |
| SITE NO. | | PROJEC' | I NAME | Pl | URCHASE ORDEI | R# | | | | |
| 7238 | 7238 metro Self muitor M78412 | | | | | | | | | |
| SAMPLERS (signature) | | | | Pl | ROJECT LOCATION | N | | | | |
| Dan 50 | 200 6th Ave 5. | | | | | | | | | |
| REMARKS | | | | SAMPLE | DISPOSAL INFO | | | | | |
| Dispose after 30 days Return Samples Call for Instructions | | | | | | | | | | |
| Sample # | Date/Time Sampled | Type of Sample | # of Lab Jars Sample | | Analyses Requested | | | | | |
| m 78412 | 7/8/59 920 | tho | 1 01 | Ca | Cur | (7W | | | | |
| | 7.4.7. | | 1 01 | | | | | | | |
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| | | | | | | | | | | |
| SIGNATURE | PE | INT NAME | COMPAN | | Date | Time | | | | |
| Relinguished by | - GELED | Thompson | Scw | | 2/8/59 | 9:35 | | | | |
| Received of State | MANU | EL MARTI | SCW FLBI | V | 2/18/89 | 9:35 | | | | |
| Remarked by: | | | | | | | | | | |
| Received by: | | | | | | 1 . | | | | |

FORMS/COC

01/22/99

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

March 2, 1999

DUPLICATE COPY

INVOICE #99ACU0302-2

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M78412: Results of testing requested by Gerry Thompson for material submitted on February 18, 1999.

1 water sample analyzed for Chromium, Copper, Nickel, and Zinc using Method 6010 @ \$80 per sample \$80.00

Amount Due \$80.00

FEDERAL TAX ID (b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

March 2, 1999

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on February 18, 1999 from your Metro Self Monitor, PO# M78412 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Manuel Marti Project Manager

Enclosures ACU0302R,DOC